

UNION PACIFIC RAILROAD COMPANY

Eastern District.

Colorado Division

Special Rules

No. 7

**Effective Friday
August 1, 1947**

Superseding Special Rules No. 6.

Employees whose duties are in any way affected
thereby, must have a copy of these rules with
them while on duty.

A. E. STODDARD,
General Manager

ELGIN HICKS,
General Superintendent

W. C. SATTERFIELD,
Superintendent

2 (R). Operating Rules 2, 2 (A) and 2 (B) are cancelled.

Employees listed below and other employees as may be designated must, while on duty, have a reliable railroad grade watch* which must not vary more than 30 seconds from correct time.

(*A railroad grade watch is one equipped with a lever set.)

- Safety Agents
- Trainmasters
- Assistant Trainmasters
- Traveling Conductors
- Road Foremen of Engines
- Traveling Firemen
- †Station Agents
- †Operators
- Conductors
- Engineers
- Brakemen
- Such other employees as may be designated

(†Except when assigned in offices where a standard clock is located.)

2 (S). Officers and employees must not make solicitation in connection with the sale of watches.

2 (T). Employees must present their watches to officers and supervisors upon request.

3 (R). Conductors and engineers of westward C. R. I. & P. first-class trains who have made and registered watch comparison at Phillipsburg or Goodland will not be required to make or register watch comparison at Limon.

Conductors and engineers of C. B. & Q. trains who have made and registered watch comparison at C. B. & Q. initial station will not be required to make or register watch comparison at Sterling or Union.

10 (R).



Rule 10 (H) is cancelled.

Reduce speed signs as illustrated above will be located 1000 feet from beginning of restricted territory and will indicate by figures the maximum speed permitted as shown in current time-table. Example: 60-40-25 will indicate maximum speed of 60 M. P. H. for streamline trains, 40 M. P. H. for DE-Psgr. and Psgr. trains, 25 M. P. H. for freight trains.

Signs bearing the letters RS will be placed to indicate the end of the restricted territory.

The entire train must pass over the designated location at the specified speed.

Such speed restrictions will also be shown in time-table or superintendent's bulletin.

17 (R). The following will govern use of oscillating red headlight:

When train becomes disabled or makes sudden stop due to unusual occurrence, or when an adjacent track is obstructed or there is possibility of it being obstructed, if red headlight is not set in motion automatically, engineer must immediately set it in motion by manual operation, and then extinguish white headlight.

A train on adjacent track must stop before passing headlight and be governed by Rule 102.

When head end protection is required, engineer will immediately display red headlight. When occupying main track in meeting an opposing train, red headlight will be displayed until opposing train dims its headlight in accordance with Rule 17 (B), after which, if switch is lined to permit opposing train to enter siding, red headlight will be extinguished.

(Continued opposite side)

93 (R). That part of last paragraph of Rule 93 reading, "(See Special Rule 152-R)" is changed to read, "See speed restrictions in time-table."

93 (S). At Cheyenne, between west wye switch and Tower A, all trains and engines must approach cross-over switches in main tracks carefully, expecting to find tracks in vicinity of passenger station occupied by trains or cars, and switches lined for other than main track movement.

Eastward trains and engines approaching west end passenger station must be prepared to stop clear of cross-over unless proceed signal is received from yardman in charge of switches.

Trains leaving passenger station must not foul lead or cross-overs until proceed signal is received from yardman in charge of switches.

Proceed signal must be answered.

Trains and engines using Colorado Division main track between Tower A and passenger station must move expecting to find the track occupied, and a speed of 20 M. P. H. must not be exceeded under any circumstances.

All eastward trains must approach west end of Cheyenne yard prepared to stop unless it can be seen that the lead is clear and switch is properly lined for their head-in track. When view is obscured or lead occupied, trainman must precede movement and know that switches are properly lined and lead clear before giving proceed signal.

93 (T). When making movement between Sable and Bunell, engines must move expecting to find track occupied by U. S. Government engines.

96 (R). A clearance must be received as follows:

- At 36th Street, all second-class and extra trains going to Denver Subdivision;
- At Gill, all trains when operator on duty.

96 (S). Trains are not required to receive clearance as per Rule 96 as follows:

- At Pullman;
- At Sand Creek Jct., when train order signal displays Proceed indication;
- At Ara;
- At Galeton, when no operator on duty;
- At Dent, when no operator on duty.

96 (T).

A Clearance Received At	By	Will Confer The Same Authority On	As When Received At
Hugo	Westward trains	Northern Subdivision	Pullman.
Limon	Westward C. R. I. & P. trains	Northern Subdivision	Pullman.
Denver	Trains going to Denver Subdivision	Denver Subdivision	Pullman.
36th Street	Trains going to Denver Subdivision	Denver Subdivision	Pullman.
Boulder	Eastward trains	Boulder Branch	Ara.
La Salle	Trains going to Denver	Northern Subdivision	Sand Creek Jct.
La Salle	Trains going to Fort Collins Branch	Fort Collins Branch	Dent.
Fort Collins	Eastward trains	Dent Subdivision	Dent.

17 (R). Continued.

Engineer finding red headlight displayed by opposing train, must stop before passing headlight, ascertain the cause and be governed by conditions.

Display of red headlight does not relieve engineers nor trainmen from protecting front of train in accordance with Rule 99, when required.

If red headlight has been set in motion automatically and necessity no longer exists, engineer must extinguish it.

When standing at terminals and red headlight is not required, it must be extinguished.

17 (S). Rule 17 (C) is cancelled

First sentence of Rule 17 is changed to read: "Headlight must be displayed to the front of every train by day and night."

17 (T). Referring to Rule 17 (D): When a Diesel engine not displaying back-up headlight is standing or moving about yards at night under conditions not requiring display of markers, a red light must be displayed on rear of engine.

19 (R). Oscillating red rear end light on passenger trains will be designated as a night signal in accordance with Rule 9 and will be displayed from sunset to sunrise and when day signals cannot be seen due to weather or other conditions. Also at any time train is moving under circumstances in which it may be overtaken by another train. Red rear end light must be extinguished when train is clear of main track and rear end protection is not required.

The displaying and extinguishing of red rear end light must be done by trainman.

Display of red rear end light does not relieve trainmen nor engineers from complying with Rule 99 nor any other rule.

21 (R). When a train is equipped with indicators, white flags will not be displayed by extra trains.

24 (R). Wabash Diesel power units Nos. 1001-1001A operating between Kansas City and Denver are not equipped with train indicators.

Trains handled by these units will be identified by the unit numbers.

27 (R). Switch lights will not be used on:

- Boulder Branch;
- Fort Collins Branch, between Fort Collins and Buckeye;
- Greeley Branch;
- Pleasant Valley Branch.

Trains and engines must approach facing point switches on these branches prepared to stop if switch is not in normal position.

28 (R). A green and white signal will be used to stop designated trains at additional stops shown in time-table.

30 (R). The bell must be kept ringing while an engine (with or without cars) is moving within the city limits of Fort Collins.

83 (R). Information contained in train register at 36th Street may be accepted as applying at Pullman.

83 (S). Trains which do not originate at 36th Street need not receive information required by Rules S-83 or D-83 at that station and conductors of such trains may register by registering ticket.

83 (T). At Union, eastward Union Pacific trains which have not ascertained that overdue C. B. & Q. trains have arrived or left, must approach C. B. & Q. junction switch at restricted speed, but if operator is located west of C. B. & Q. junction switch and gives proceed signal and delivers train order check on C. B. & Q. trains that are overdue, and if block signals indicate Proceed, eastward trains may proceed at slow speed without stopping.

98 (R). Trains and engines must be governed by the following at the railroad crossings and junctions indicated:

Location	Railroad Crossed or Junction with	Trains Which Have Precedence	How Governed
Limon (M. P. 550.5)	C. R. I. & P.	U. P.	Non-operative block signal displaying Stop indication.
Limon Jct. (M. P. 550.6)	C. R. I. & P.	U. P.	Dwarf signal.
Pullman (M. P. 2.2)	Outbound main track	Northern Subdivision	Block Signals. Special Rule 98(S).
36th Street (M. P. 1.8)	Outbound main track	Westward	Block Signals. Special Rule 98(S).
Eaton (M. P. 59.3)	G. W.	U. P.	Semi-automatic Interlocking. Rule 616.
St. Vrain (M. P. 22.2)	Boulder Branch	Dent Subdivision	Semi-automatic Interlocking. Rule 616.
Wild Cat (M. P. 40.9)	G. W.	U. P.	Semi-automatic Interlocking and gate. Rule 616.
Erie (M. P. 15.1)	C. B. & Q.	U. P.	Stop signs. Special Rule 98(T).
Valmont Spur (M. P. 1.0)	C. & S.	U. P.	Gate.
Ara (M. P. 26.0)	C. & S.	C. & S.	Gate.
Milliken (M. P. 2.0)	G. W.	U. P.	Gate.
Kelim (M. P. 9.0)	G. W.	G. W.	Stop signs.
Fort Collins (M. P. 25.2)	C. & S.	C. & S.	Derails. Special Rule 98(V).
Fort Collins (M. P. 25.3)	C. & S.	C. & S.	Gate.
Union (M. P. 81.0)	C. B. & Q.		Block Signals. Special Rule 83(T).

98 (S). All first-class trains must stop clear of cross-over at 36th Street unless proceed signal is received from switchtender and it is known that the switches are properly lined.

All Northern Subdivision first-class trains and trains moving to or from Denver Subdivision must stop clear of cross-over at Pullman, unless proceed signal is received from switchtender and it is known that the switches are properly lined.

98 (T). At Erie, C. B. & Q. Crossing, trains must stop before passing Stop sign. Westward trains must send member of crew to crossing to give proceed signal from crossing if no conflicting movement is evident. When visibility is reduced by weather conditions, eastward trains must also send member of crew to crossing to give proceed signal from crossing if no conflicting movement is evident.

98 (U). Eastward trains using Greeley Branch main track between Greeley Junction and cross-over located at M. P. 53.1 (near rendering plant), must stop clear of cross-over unless it is known switches are properly lined and track is clear.

98 (V). At Fort Collins, C. & S. Crossing, M.P. 25.2, westward U. P. trains must throw derail, and it must not be relined until the entire train is clear of the crossing. Eastward U. P. trains must stop clear of the crossing and not proceed until the derails are thrown.

99 (R). Last paragraph of Rule 99 is changed to read: "Night signals—A white light, not less than ten torpedoes and six fuses." At night and during foggy or stormy weather, a lighted red fusee will be used for hand signals required by Rule 99.

This does not change the requirements of Rule 99 (F). Each caboose must be equipped with a red lantern for use as required by Rule 19 (C). The equipment of each engine must include a red lantern as required by Rule 869. Last sentence of Rule 870 is cancelled.

99 (S). Trains may be relieved from protecting against following extra trains by the use of Example (7) of train order Form E, only as follows:

Ellis Subdivision;
Hugo Subdivision;
Greeley Branch;
Pleasant Valley Branch;
Fort Collins Branch, between Fort Collins and Buckeye;
Boulder Branch, between Erie and Ara.

99 (T). Between 7:30 A. M. and 5:01 P. M. daily except Sunday, on Greeley and Pleasant Valley Branches, trains must not exceed 10 M. P. H. on all crossings, and will keep close lookout for track cars and men working without flag protection.

101 (R). Between Union and Beta, trainmen and enginemen must be on lookout for any unusual amount of water on north side of track, and when such condition is observed a report by wire must be made to superintendent, division engineer, chief dispatcher and roadmaster.

103 (R). Referring to Rule 103(D), when Diesel yard engine is used, a yardman or trainman may ride on side steps or platform in direction engine is moving instead of on leading footboard.

103 (S). Where reference is made in Rule 103 (C) to rear of tender engines, this requirement will also apply to rear end of Diesel engines.

103 (T). At public crossing protected by crossing watchman and crossing gates, yard crews must know gates are down and crossing protected before making movement over the crossing with engine or car; otherwise crossing must be protected by member of crew.

103 (U). A yardman or a trainman need not ride on leading footboard of engine, as follows:

Between Denver and Sand Creek Junction, continuous main track movement;
At Denver, on stockyards lead, over Wynkoop Street and Brighton Boulevard.

103 (V). Trains and engines must stop before crossing and must be preceded by flagman over Lincoln Highway at Division Street, Brighton Sugar factory, and public crossing North College Avenue, Fort Collins.

103 (W). At Sand Creek Jct., an eastward train on Dent Subdivision stopped by interlocking signal must stand west of Brighton Paved Road until movement through interlocking can be made.

103 (X). At Greeley, at 8th Street, all train and engine movements over this crossing on any track except Northern Subdivision main track must be protected by trainman as prescribed by Rules 103 (B) and 103 (C).

Trains and engines on Greeley Branch main track must not exceed 10 M. P. H. over this crossing.

221 (R). At St. Vrains, trains on Dent Subdivision and on Boulder Branch must observe and be governed by the indication of the train order signal at all times.

509 (R). Push button release has been installed on case of the following signals:

Lake
Limon
Cedar Point
Buick
Magee
Sable
Roydale

When one of these signals indicates Stop and push button release is held closed for five seconds, signal will change to Proceed indication if no train is occupying that block.

509 (S). An eastward train leaving Pullman or a westward train leaving Roydale will cause block signals between Pullman and Roydale to display restrictive indication. A train using siding at Sandown must stand west of dwarf signal in order to permit block signals between Pullman and Sandown to display Proceed indication. Trains using

4

802 (S). Continued.

BE 589(b) (2). When transporting a car placarded "Explosives" in terminals, yards, side tracks, or siding, such cars shall be separated from the engine by at least one non-placarded car.

BE 589(b) (3). Closed cars placarded "Explosives" shall have doors closed before they are moved.

Switching of Cars Containing Dangerous Articles

BE 589(c) (1). In switching operations where use of hand brakes is not necessary, a placarded loaded tank car, or a draft which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the draft containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

BE 589(c) (2). In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a draft containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

Placement of Freight Cars Containing Explosives, in Yards, on Sidings or Sidetracks

BE 589(d) (1). Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

Notice to Crews of Cars Containing Explosives in Train

BE 589(e) (1). At all terminals or other places where trains are made up, the railroad shall execute a consecutively numbered notice showing the location in the freight train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points other than terminals where train or engine crews are changed, the notice shall be transferred from crew to crew.

Position in Train of Cars Containing Explosives

BE 589(f) (1). In a train either standing or during transportation thereof, a car placarded "Explosives" shall, when the length of the train permits, be not nearer than the sixteenth car from both the engine or occupied caboose; and shall, when the length of the train will not permit them to be so placed, be as near as possible to the middle of the train.

BE 589(f) (2). In a freight train or mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to any car placarded "Dangerous". A car placarded "Explosives" or a placarded loaded tank car shall not be next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Engine. (Except when train consists only of placarded loaded tank cars.)
4. Car placarded "Poison Gas".
5. Wooden under-frame car.
6. Loaded flat car.
7. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
8. Car equipped with automatic refrigeration of the gas-burning type.
9. Car containing lighted heaters, stoves, or lanterns.
10. Car loaded with live animals or fowl, occupied by an attendant.
11. Occupied caboose. (Except when train consists only of placarded loaded tank cars.)

Position in Train of Loaded Placarded Tank Cars

BE 589(g) (1). In a train either at rest or during transportation thereof, a placarded loaded tank car shall not, when the length of the train permits, be nearer than the sixth car from the engine or occupied caboose, but in no instance nearer than the second car on such train unless the entire train consists of such cars.

(Continued opposite side)

5

Siding at Sandown should clear main track in sufficient time to avoid holding stop signal against other trains, and siding should not be used by trains except in emergency. Switch indicator has been installed at west switch at Sandown. See Rule 521.

605 (R). To indicate route to be used, following whistle signals will be used:

At Julesburg:

For movement from westward main track to Colorado Division or from Colorado Division to eastward main track..... 0
For movement from westward main track to eastward main track or from Colorado Division to westward main track..... 0 0

At Sterling:

For main track..... 0
For diverging route..... 0
For stockyards track..... 0 0 0

At Tower A:

Stock yard..... 0
Colorado Division main track..... 0
New yard south lead..... 0
Wyoming Division eastward main track..... 0 0
Wyoming Division westward main track..... 0 0 0

713 (R). A trainman must be stationed on rear of train in position to give or receive signals, when passing depot at the following stations:

Monument Wild Horse
Page City Aroya Valmont
Arapahoe Goodrich Milliken

719 (R). Within the State of Kansas, passengers holding tickets may be carried on freight trains between stations at which the trains stop, except trains consisting mostly of stock, but passengers under 15 years of age must be accompanied by parent, guardian or other competent person.

Passengers holding tickets may be carried on freight trains on Greeley and Pleasant Valley Branches.

721 (R). Unauthorized persons, including deadhead train or engine crews, must not occupy cab of trailing unit of Diesel engine on freight or passenger train.

722 (R). Employees must not ride on top or on side ladders of cars being moved by or under tipples or other structures at coal mines.

733 (R). There is hazard of carbon monoxide fumes from exhaust of Diesel or gasoline engines and precautions must be taken to avoid possibility of accident therefrom. Exhaust from such engines must not be located in close proximity of fresh air intake of passenger cars and care must be exercised at all times to see that there is sufficient ventilation where such engines are operated.

802 (R). All persons are prohibited from riding in cars while being switched, which are in the process of loading or unloading. Part loads will not be switched unless properly broken down or properly braced to prevent contents falling and being damaged. Before switching with or moving cars which are in the process of loading or unloading, persons working in the car must be notified and trainmen and yardmen should see that cars are not switched with until cars are vacated.

802 (S). Trainmen, enginemen, yardmen, agents and other employees who in any way handle or care for explosives and other dangerous articles must familiarize themselves with the regulations and instructions governing the handling of them.

Placards on Cars

BE 589(a) (1). A car requiring car certificates and "Explosives" "Dangerous", or "Poison Gas" placards under the provisions of these regulations shall not be transported unless such freight car is at all times placarded and certificated as required by these regulations. Placards lost in transit shall be replaced at next inspection point.

BE 589(a) (2). At points where trains are inspected, cars placarded "Explosives" and adjacent cars shall be inspected; such cars shall continue in movement only when inspection shows them to be in condition for safe transportation.

Switching Cars Containing Explosives or Poison Gas

BE 589(b) (1). A car placarded "Explosives" or placarded "Poison Gas" shall not be cut off while in motion. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives" or placarded "Poison Gas". No freight car placarded "Explosives" or placarded "Poison Gas" shall be coupled into with more force than is necessary to complete the coupling.

(Continued on Page 5)

802 (S). Continued.

Position in Train of Cars Placarded "Poison Gas" or Containing Poison Liquids Class A

BE 589(h) (1). In a train either at rest or during transportation, a car placarded "Poison Gas" or containing poison liquid Class A shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous".

Position in Train of Cars Placarded "Explosives" and "Poison Gas" or Containing Poison Liquids when Occupied by Cars Carrying Gas Handling Crews

BE 589(i) (1). A car placarded "Poison Gas" or containing poison liquid Class A in drums, tanks or bombs, or a car placarded both "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by gas handling crews, when accompanying such car.

Cars Containing Explosives or Poison Gas and Tank Cars Placarded "Dangerous" in Passenger or Mixed Trains

BE 589(j) (1). Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars requiring "Dangerous" placards shall not be transported in a passenger train. Such cars may be transported in mixed trains, but only between points between which freight train service is not operated.

BE 589(j) (2). Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains except as provided in sec. 589(i) (1).

BE 589(j) (3). When a car containing explosives, Class B, or dangerous articles other than explosives requiring labels (not including Class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employee of the carrier, placards must be applied to the car as required by these regulations.

Empty tank cars must not be moved from stations unless dome cover and all outlet caps have been replaced and wrenched tight, shipping tags and cards removed from car, and "Inflammable" placards removed or replaced by "Dangerous Empty" placards.

802 (T). Cars may be handled ahead of engine when necessary on coal runs between St. Vrains and Parkdale Jct.

803 (S). Power transmission wires carrying 2300 volts are located on top cross arm of signal pole line.

804 (R). Assistant Supervisor Oil-Gas-Electric Mobile Power is responsible for the proper sealing of cut-out cock controlling the safety control feature in air brake equipment of Diesel-electric road locomotives; however, engineer must know that cut-out cock is sealed in proper position when taking over Diesel road locomotive and before departure of train from terminal.

804 (S). Stock cars equipped with roller bearings will start with much less effort than those otherwise equipped. When such cars are set out, either in yards or on line, hand brakes must be set in accordance with Rule 804 (A), if there is any possibility of their moving.

805 (R). Rear of lounge cars operating in "City of Portland" must not be coupled into with passenger car equipped with diaphragm, account insufficient clearance.

807 (R). Cars must not be handled behind caboose as follows:
Between Cheyenne and Speer —Eastward;
Between Carr and Borie —Westward.

811 (R). On locomotive, tender and freight car wheels, flat spots two and one-half inches or longer, or if there are two or more adjoining spots each two inches or longer, and on passenger cars including streamline train equipment one inch or longer, are condemnable and when discovered in train, conductor or engineer must immediately report to chief dispatcher and be governed by his instructions.

811 (S). In addition to making inspection of train as often as practicable as per Rule 811, every freight train must stop and must be inspected at the following points:

Oakley —Eastward and westward;
Kit Carson —Eastward and westward;
Deer Trail —Eastward and westward;
Carr —Eastward freight and mixed trains;
LaSalle —Eastward and westward;
LaSalle —Eastward mixed trains.

811 (T). Passenger train with freight engine must stop at LaSalle to inspect engine. While engine is being inspected, trainmen must inspect train.

823 (R). On multiple unit Diesel engine, not more than four men may ride in cab of leading unit. On freight train when cab is occupied by four men, head brakeman will ride in cab of trailing unit.

874 (R). Duties of firemen on multiple unit Diesel-electric road locomotives: Second paragraph of Rule 874 is changed to read: "On Diesel-electric through passenger trains that make few or no stops, fireman will remain in control room at all times when train is in motion."

At initial terminals, before departure, fireman will go through engine rooms and make careful inspection of gauge indications, oil levels, engine temperatures and shunter controls. Any unusual condition detected or irregularity found must be reported to engineer.

At all intermediate stations or stops, when time permits, fireman will make same observations in engine rooms as outlined above.

At points where firemen change, incoming fireman will assist outgoing fireman in inspecting gauges, blowing boilers and other required duties.

At stations where locomotive is to be detached, fireman will close main valve to train heat line.

When locomotive is coupled to train at initial or intermediate station, or where cars are in or out of train, fireman, on request or proper signal, will open main valve to train heat line. Unless locomotive equipped with remote control valve, opening or closing of main valve to train heat must be done while train is standing.

Warning lights located in cab on left side of panel board indicate:

1. Low oil pressure;
2. Hot engine;
3. Fire out in steam heat generator.

Warning bell located in cab will ring when any of the above indications are displayed. If necessary, train must be stopped for inspection and necessary attention.

875 (R). When an engine crew has taken charge of an oil-burning engine, the engine must not be left without an engineman in charge until delivered to roundhouse employe.

Adequate spot fire to provide near maximum steam pressure must be maintained on oil-burning engines when not working steam to avoid fire box leakage.

896 (R). [Tracks which may be used by 0-6-0 type or heavier engines may be used by Diesel switch engines.]

800, 3900 and 9000 class engines must not go on the following tracks:

- Ellis
- Hugo
- Roydale
- Brighton
- Greeley
- Greeley Jct.

9000 class and heavier engines must not go on the following tracks:

- Oakley
- Sharon Springs
- Kit Carson
- Deer Trail
- LaSalle
- Pierce
- Carr
- Julesburg
- Dent

800, 3900, 5000, 9000 class and heavier engines must not go on the following tracks: (7000 class engines may use these tracks, but a speed of 5 M. P. H. must not be exceeded).

- Voda
- Oakley
- Winona
- Sharon Springs

Sorrento

Hugo

(Continued opposite side)

896 (R). Continued.

5000, 7000 and 9000 class and heavier engines must not go on the following tracks: Denver

- Cross-over inbound to outbound switches No. 36 and 36(A), Tower "B";
- All industry tracks including Blake and Market Street leads;
- Coach yard tracks;
- Freight house tracks and leads and cross-overs leading thereto;
- Stake and train yards;
- All Pullman Shop tracks except engine tracks leading to and from turntable and transfer table;
- All coal storage tracks;
- Summit track;
- Sugar company trestles;
- Sugar company trestles;
- Post coal spur;
- No. 4 storage track;
- C. & S. connection;
- Sugar company trestles;
- East end mill tracks;
- Cross-over at beet hopper;
- West industry spur;
- East lead to sugar factory;
- C. B. & Q. coach spur;
- Sterling mine tippie tracks;
- Baum Mine tippie tracks;
- Industry east of elevator track.

Lupton

Greeley

Eaton

Ovid

Sterling

Frederick

5000 class and heavier engines must not go on the following tracks, account No. 7 turnouts:

- East end of wrecker track;
- Stock car cleaning tracks;
- Outside creamery track;
- East end of repair tracks at 23rd Street viaduct;
- Sugar factory tracks.

3900 and 9000 class engines picking up or setting out cars will hold onto sufficient cars so that engine will not pass beyond main track frog leading to industries on house tracks or pass beyond siding frog leading to back tracks off of sidings.

At Sharon Springs, Hugo, LaSalle and Sterling, engines must not go on depressed track of cinder pit.

At Sterling, cars must not be spotted between air boxes and Chestnut Street.

At Valmont, engines must not go on the sharp curve at west end of Public Service power plant.

At Sharon Springs, Hugo, LaSalle and Sterling, 800, 3900, 4000, 5000, 7000 and 9000 class engines must not be turned on turntables.

2400 class engines may use tracks laid with 60-pound rail at a speed not to exceed 5 M. P. H., but must not go on any trestle tracks.

At Brighton, 2400 class and heavier engines must not be used on tracks serving Kumer Canning Factory.

900 (R). Pennsylvania box cars, series 36987-37090 inclusive, inside length 60 feet 6 inches and height over running board 15 feet 2½ inches. The handling of these cars must be closely watched when movements made over yard, warehouse and industrial tracks and tracks adjacent to umbrellas and train sheds at passenger stations, to know there is sufficient clearance.

900 (T). Following are maximum clearances through all tracks except track 10 at Denver Union Station:

From car floor to 14 feet above top of rail, maximum width must not exceed 12 feet.

From 14 feet above top of rail to 14½ feet above top of rail, maximum width must not exceed 10 feet.

From 14½ feet above top of rail to 15 feet above top of rail, maximum width must not exceed 8 feet.

15 feet above top of rail is maximum height for any car or load to clear umbrellas train sheds.

Cars or loads exceeding the above dimensions must be handled through Denver Union Station on track 10.

1006 (R). Standard brake pipe pressure for main line passenger trains is 110 pounds.

Standard brake pipe pressures in freight and mixed train service are as follows:

Westward:
Denver to Sherman →70 pounds
Speer to Cheyenne —90 pounds

Eastward:
Sherman to Denver —90 pounds
Cheyenne to Denver —90 pounds.

1018 (R). Air Brake Rule 1018 is changed to read:
"Speed governor control with high speed control brake equipment must be in operation on passenger train cars so equipped, when handled in passenger trains and must be made inoperative when such cars are handled in freight and mixed trains. Toggle switch located adjacent to air brake control relay cabinet controls operation of speed governor control and must be placed in 'On' position for operation and in 'Off' position to discontinue operation. Safety valve on D-22 control valve must be adjusted to 75 pounds air pressure when speed governor control is in operation and this safety valve must be adjusted to 60 pounds air pressure when speed governor control is not in operation."

1030 (R). Where Sperry rail-detector car is working when temperature is below freezing, trains, engines and track cars must be operated at a safe speed, using sand where necessary to overcome slippery condition caused by use of calcium chloride solution used by rail car.

1035 (R). On passenger trains, running test as required by Air Brake Rule 1035 must be made at the following points:
Speer—Eastward;
Speer—Westward, except via Borie.

1040 (R). Eastward freight trains between Speer and Carr must make test required by Air Brake Rule 1040 (C) when angle cock has been turned or hose separated.

1042 (R). Retaining valves must be used Borie to Carr on fifty percent of cars in all eastward freight trains of 2500 tons or more, except that trains averaging not to exceed sixty gross tons per car may be handled without the use of retaining valves when handled by engines equipped with two air compressors which are operative.

1093 (R). Following has been added to Air Brake Rule 1093 (I):
If rear end of rear car is not equipped with inside operating lever to steam train line end valve, or if for any reason inside operating lever cannot be operated, trainman must fully open steam train line end valve from ground immediately after train is stopped.

1238 (R). On streamline trains, running test as required by Air Brake Rule 1238 must be made at the following points:
Speer—Eastward;
Speer—Westward, except via Borie.

900 (S). There are close clearances above and at the side of main tracks as shown below, and in addition thereto, at platforms and other structures above and at the side of industry and other tracks.

Snow plows must not exceed 5 M.P.H. on main track or siding by locations shown below account close clearance:

Location	Structure or obstruction	Clearance of engine or car is close at—
At all stations.....	Mail cranes.....	Side.
Ellis Subdivision.	Standpipe.....	Side.
Buffalo Park.....	Standpipe west of depot.....	Side.
Oakley.....	Bridge.....	Side.
M. P. 405.61.....	Bridge.....	Side.
M. P. 427.80.....	Bridge.....	Side.
Hugo Subdivision.	Standpipe east of depot.....	Side.
Sharon Springs.....	Standpipe west of depot.....	Side.
Cheyenne Wells.....	Bridge.....	Side.
M. P. 514.94.....	Bridge.....	Side.
M. P. 522.79.....	Bridge.....	Side.
Clifford.....	Bridge.....	Side.
M. P. 534.63.....	Bridge.....	Side.
Denver Subdivision.	Standpipe west of depot.....	Side.
Hugo.....	Standpipe.....	Side.
Deer Trail.....	Bridge.....	Side.
M. P. 592.09.....	Bridge.....	Side.
M. P. 602.15.....	Bridge.....	Side.
M. P. 607.80.....	Bridge.....	Side.
Strasburg.....	Standpipe.....	Side.
Northern Subdivision.	Signal 22.....	Side.
Denver.....	Signal 24.....	Side.
M. P. 15.68.....	Bridge.....	Side.
M. P. 16.36.....	Bridge.....	Side.
Brighton.....	Signal 192.....	Side.
Greeley.....	Station platform will not clear snow plow and spreaders.	Side.
Pierce.....	Standpipe east of depot.....	Side.
Speer.....	Train order signal.....	Side.
Julesburg Subdivision.	Standpipe west of depot.....	Side.
M. P. 7.05.....	Standpipe.....	Side.
M. P. 33.19.....	Bridge.....	Side.
M. P. 48.71.....	Bridge.....	Side.
M. P. 50.34.....	Bridge.....	Side.
Crook.....	Standpipe.....	Side.
Sterling.....	First semaphore east of depot.....	Side.
Sterling Subdivision.	Snow plows on main track or siding will not clear standpipes.	Side.
Sterling.....	Standpipe east of depot.....	Side.
Fort Morgan.....	Standpipe west of depot.....	Side.
M. P. 106.41.....	Coal chute.....	Side.
M. P. 132.53.....	Bridge.....	Side.
Fort Collins Branch.	Bridge.....	Side.
Fort Collins.....	Standpipe.....	Side.
M. P. 26.79.....	Bridge.....	Side.
M. P. 31.84.....	Bridge.....	Side.

RATING OF ENGINES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS

Total weight of trains, exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Engine	Numbers (Inclusive)	Ellis to Denver	Denver to LaSalle	LaSalle to Carr	Carr to Borie	Speer to Cheyenne	Julesburg to LaSalle	Dent to Fort Collins
C 57 $\frac{22}{30}$ 190	201 to 358	1500	3000	1450	1000	3000	2000	1800
C 57 $\frac{21}{30}$ 162	400 to 499	1350	2500	1250	750	2500	1800	1600
MacA 57 $\frac{23\frac{1}{2}}{30}$ 206	1900 to 1949	2000	3000	1600	1200	3500	2500	2200
MacA 63 $\frac{26}{28}$ 210	2200 to 2320	2000	4000	2000	1300	3500	3000	2500
MacA 63 $\frac{26}{30}$ 212	2480 to 2499	2200	4000	2400	1500	3500	3000	3000
MacA 63 $\frac{26}{30}$ 222	3500 to 3569	3500	5000	4000	3000	4500	6000	
SA-C 59 $\frac{23-23}{30}$ 475	3950 to 3969	3200	5000	4000	3000	4500	4500	
4-6-6-4 $\frac{3}{5}$ 404	3975 to 3999	2700	5000	4000	3000	3500	4000	
69 $\frac{4}{5}$ 407	3950 to 3969	3200	5000	4000	3000	4500	4500	
405	3975 to 3999	2700	5000	4000	3000	3500	4000	
TTT 63 $\frac{29\frac{1}{2}}{30}$ 286	5000 to 5089	2700	5000	3000	1800	3500	4000	
311	9000 to 9087	3200	5000	4000	3000	4500	4500	
UP 67 $\frac{27}{31-32}$ 368	800 to 819	1940		2130	1780		5480	2950
FEF 77 $\frac{24\frac{1}{2}}{32}$ 266	820 to 844							
FEF 80 $\frac{25}{32}$ 266	2860 to 2899							
	165							
P 77 $\frac{25}{26}$ 167	2900 to 2911	1340		1460	1220		3720	2010
	184							
	193							
MT 73 $\frac{29}{28}$ 256	7000 to 7038	1710		1870	1590		4770	2580
	261							

EXPLANATION

C.....Consolidation
 MacA.....MacArthur
 SA-C.....Mallet
 TTT.....2-10-2
 UP.....4-12-2
 FEF.....4-8-4
 P.....Pacific
 MT.....Mountain

EXAMPLE: Consolidation engine having 57-inch drivers, cylinders 21-inch diameter and 30-inch stroke, and weighing 162,000 pounds on drivers:

C 57 $\frac{21}{30}$ 162

RATING OF ENGINES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS

Total weight of trains, exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Engine	Numbers (Inclusive)	Denver to Ellis	LaSalle to Denver	Carr to LaSalle	Borie to Carr	Cheyenne to Speer	LaSalle to Julesburg	Fort Collins to Dent
C 57 $\frac{22}{30}$ 190	201 to 358	1500	2500	3000	3000	1100	4500	1800
C 57 $\frac{21}{30}$ 162	400 to 499	1350	2000	2000	2000	1000	3000	1600
MacA 57 $\frac{23\frac{1}{2}}{30}$ 206	1900 to 1949	1800	3000	3000	3000	1200	4500	2000
MacA 63 $\frac{26}{28}$ 210	2200 to 2320	2000	3200	4000	4000	1400	5000	2500
MacA 63 $\frac{26}{30}$ 212	2480 to 2499	2200	3500	4000	4000	1500	5000	3000
MacA 63 $\frac{26}{30}$ 222	3500 to 3569	3500	5000	5000	5000	2500	6000	
SA-C 59 $\frac{23-23}{30}$ 475	3950 to 3969	3200	5000	5000	5000	2500	6000	
4-6-6-4 $\frac{3}{5}$ 404	3975 to 3999	2700	4000	5000	5000	1800	6000	
69 $\frac{4}{5}$ 407	3950 to 3969	3200	5000	5000	5000	2500	6000	
406	3975 to 3999	2700	4000	5000	5000	1800	6000	
TTT 63 $\frac{29\frac{1}{2}}{30}$ 286	5000 to 5089	3200	5000	5000	5000	2500	6000	
311	9000 to 9087	1780						
UP 67 $\frac{27}{31-32}$ 368	800 to 819							
FEF 77 $\frac{24\frac{1}{2}}{32}$ 266	820 to 844							
FEF 80 $\frac{25}{32}$ 266	2860 to 2899							
	165							
P 77 $\frac{25}{26}$ 167	2900 to 2911	1220						
	184							
	193							
MT 73 $\frac{29}{28}$ 256	7000 to 7038	1590		4770		1550		2580
	261							

EXPLANATION

C.....Consolidation
 MacA.....MacArthur
 SA-C.....Mallet
 TTT.....2-10-2
 UP.....4-12-2
 FEF.....4-8-4
 P.....Pacific
 MT.....Mountain

EXAMPLE: Consolidation engine having 57-inch drivers, cylinders 21-inch diameter and 30-inch stroke, and weighing 162,000 pounds on drivers:

C 57 $\frac{21}{30}$ 162

STATE OF MICHIGAN - DEPARTMENT OF AGRICULTURE

Year	Wheat	Rye	Oats	Barley	Flax	Other	Total
1911	1,200,000	100,000	2,500,000	1,000,000	500,000	1,000,000	6,700,000
1912	1,100,000	100,000	2,400,000	1,000,000	500,000	1,000,000	6,500,000
1913	1,000,000	100,000	2,300,000	1,000,000	500,000	1,000,000	6,300,000
1914	900,000	100,000	2,200,000	1,000,000	500,000	1,000,000	6,100,000
1915	800,000	100,000	2,100,000	1,000,000	500,000	1,000,000	5,900,000
1916	700,000	100,000	2,000,000	1,000,000	500,000	1,000,000	5,700,000
1917	600,000	100,000	1,900,000	1,000,000	500,000	1,000,000	5,500,000
1918	500,000	100,000	1,800,000	1,000,000	500,000	1,000,000	5,300,000
1919	400,000	100,000	1,700,000	1,000,000	500,000	1,000,000	5,100,000
1920	300,000	100,000	1,600,000	1,000,000	500,000	1,000,000	4,900,000
1921	200,000	100,000	1,500,000	1,000,000	500,000	1,000,000	4,700,000
1922	100,000	100,000	1,400,000	1,000,000	500,000	1,000,000	4,500,000
1923	100,000	100,000	1,300,000	1,000,000	500,000	1,000,000	4,300,000
1924	100,000	100,000	1,200,000	1,000,000	500,000	1,000,000	4,100,000
1925	100,000	100,000	1,100,000	1,000,000	500,000	1,000,000	3,900,000
1926	100,000	100,000	1,000,000	1,000,000	500,000	1,000,000	3,700,000
1927	100,000	100,000	900,000	1,000,000	500,000	1,000,000	3,500,000
1928	100,000	100,000	800,000	1,000,000	500,000	1,000,000	3,300,000
1929	100,000	100,000	700,000	1,000,000	500,000	1,000,000	3,100,000
1930	100,000	100,000	600,000	1,000,000	500,000	1,000,000	2,900,000
1931	100,000	100,000	500,000	1,000,000	500,000	1,000,000	2,700,000
1932	100,000	100,000	400,000	1,000,000	500,000	1,000,000	2,500,000
1933	100,000	100,000	300,000	1,000,000	500,000	1,000,000	2,300,000
1934	100,000	100,000	200,000	1,000,000	500,000	1,000,000	2,100,000
1935	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,900,000
1936	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,700,000
1937	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,500,000
1938	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,300,000
1939	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,100,000
1940	100,000	100,000	100,000	1,000,000	500,000	1,000,000	900,000
1941	100,000	100,000	100,000	1,000,000	500,000	1,000,000	700,000
1942	100,000	100,000	100,000	1,000,000	500,000	1,000,000	500,000
1943	100,000	100,000	100,000	1,000,000	500,000	1,000,000	300,000
1944	100,000	100,000	100,000	1,000,000	500,000	1,000,000	100,000
1945	100,000	100,000	100,000	1,000,000	500,000	1,000,000	0

NOTE: The above figures are based on the best available information and are subject to change. The figures for 1940 and 1941 are preliminary estimates.

STATE OF MICHIGAN - DEPARTMENT OF AGRICULTURE

Year	Wheat	Rye	Oats	Barley	Flax	Other	Total
1946	100,000	100,000	100,000	1,000,000	500,000	1,000,000	2,800,000
1947	100,000	100,000	100,000	1,000,000	500,000	1,000,000	2,600,000
1948	100,000	100,000	100,000	1,000,000	500,000	1,000,000	2,400,000
1949	100,000	100,000	100,000	1,000,000	500,000	1,000,000	2,200,000
1950	100,000	100,000	100,000	1,000,000	500,000	1,000,000	2,000,000
1951	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,800,000
1952	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,600,000
1953	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,400,000
1954	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,200,000
1955	100,000	100,000	100,000	1,000,000	500,000	1,000,000	1,000,000
1956	100,000	100,000	100,000	1,000,000	500,000	1,000,000	800,000
1957	100,000	100,000	100,000	1,000,000	500,000	1,000,000	600,000
1958	100,000	100,000	100,000	1,000,000	500,000	1,000,000	400,000
1959	100,000	100,000	100,000	1,000,000	500,000	1,000,000	200,000
1960	100,000	100,000	100,000	1,000,000	500,000	1,000,000	0

NOTE: The above figures are based on the best available information and are subject to change. The figures for 1940 and 1941 are preliminary estimates.